

REMARKS

Claims 1-17, 19-37, 41-43, 45-49, 53-55, and 57-59 are currently pending in the subject application and are presently under consideration. Claims 1, 32, 41, and 57-58 have been amended herein to further emphasize aspects of applicants' claimed invention. A version of all pending claims is presented at pages 2-11 of this Reply. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Rejection of Claims 1-7, 10, 11, 15, 31-34, 36, 37, 41-43, 45-47, 49, 53-55, and 57-59 Under 35 U.S.C. §103(a)

Claims 1-7, 10, 11, 15, 31-34, 36, 37, 41-43, 45-47, 49, 53-55, and 57-59, stand rejected under 35 U.S.C. §103(a) as being obvious over Hays *et al.* (US 6,260,004) in view of Grimm *et al.* (US 6,369,472) and further in view of Kato *et al.* (US 6,415,200). Withdrawal of this rejection is requested for at least the following reasons. Hays *et al.* Grimm *et al.* and Kato *et al.*, alone or in combination, do not teach or suggest all features set forth in the subsection claims.

The rationale to support a conclusion that the claim would have been obvious is that *all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods* with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. *KSR*, 550 U.S. at ___, 82 USPQ2d at 1395; *Sakraida v. AG Pro, Inc.*, 425 U.S. 273, 282, 189 USPQ 449, 453 (1976); *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57, 62-63, 163 USPQ 673, 675 (1969); *Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp.*, 340 U.S. 147, 152, 87 USPQ 303, 306 (1950). . . . *If any of these findings cannot be made, then this rationale cannot be used to support a conclusion that the claim would have been obvious* to one of ordinary skill in the art. MPEP 2143.

Applicants' claimed subject matter relates to systems and methods for controlling and diagnosing motorized systems according to vibration, pressure, temperature, speed, and/or current analysis. In particular, the claimed subject matter provides a diagnostics

and control system for controlling a motorized system and diagnosing the health thereof, with a controller operatively associated with the motorized system and adapted to operate the motorized system in a controlled fashion, and a diagnostics system operatively associated with the motorized system and adapted to diagnose the health of the motorized system according to a measured attribute associated with the motorized system. To this end, independent claims 1, 32, 41 and 57-59, as amended, recite similar aspects, namely: *the diagnostic system includes at least one of a post processing portion that is a fuzzy rule based expert system or an associative list memory component that handles long bit strings of data, the associative list memory component based at least on an unsupervised training technique capable of learning within a single epoch.* Hays *et al.* Grimm *et al.*, Kato *et al.*, individually or in combination, fail to teach or suggest these aspects of applicants' claimed matter.

Hays *et al.* discloses an apparatus and method for diagnosing a pump system, wherein diagnostics are utilized to determine impending failures of a pump and Grimm *et al.* relates to a device for acquiring operating parameters of an electric motor, such as a number of motor starts and a number of operating hours to provide reliable information regarding whether the electric motor can be reused after a certain operating time or must be discarded. Nevertheless as the Office acknowledges neither Hays *et al.* nor Grimm *et al.* include a post-processing aspect that is a fuzzy rule-based expert system. Thus, to overcome this deficiency in the primary and secondary documents, the Office offers Kato *et al.*

Kato *et al.* relates to a feedback compensating apparatus for adjusting the working condition of a working machine of a working system adapted to process working portions of successive work pieces under control of a machine controller, which determines the working condition from an extraneous signal. However, Kato *et al.*, like Hays *et al.* and Grimm *et al.*, is silent with regard to a diagnostic system that includes a post processing portion that is a fuzzy rule based expert system and an associative list memory component that handles long bit strings of data, where the associative list memory component is based at least on an unsupervised training technique capable of learning within a single epoch. Nowhere in the primary, secondary, or tertiary references is such

an aspect taught, let alone suggested. Accordingly, withdrawal of this reject is respectfully requested.

II. Rejection of Claims 8-9, 12-14, 16-17, and 19 Under 35 U.S.C. §103(a)

Claims 8-9, 12-14, 16-17, and 19 stand rejected under 35 U.S.C. §103(a) as being obvious over Hays *et al.* (US 6,260,004), Grimm *et al.* (US 6,369,472), Kato *et al.* (US 6,415,200) and further in view of Ogi *et al.* (US 5,419,197). This rejection should be withdrawn for at least the following reason. Claims 8-9, 12-14, 16-17, and 19 depend from independent claim 1 and the secondary documents, alone or in combination, do not cure the aforementioned deficiencies with regard Hays *et al.* and the subject independent claim. Accordingly, this rejection should be withdrawn.

III. Rejection of Claims 20-30, and 35 Under 35 U.S.C. §103(a)

Claims 20-30, and 35 stand rejected under 35 U.S.C. §103(a) as being obvious over Hays *et al.* (US 6,260,004), Grimm *et al.* (US 6,369,472), Kato *et al.* (US 6,415,200) and further in view of Petsche *et al.* (US 5,640,103). Withdrawal of this rejection is requested for at least the following reason. Claims 20-30, and 35 depend from independent claims 1 and 32 respectively, and Grimm *et al.* (US 6,369,472), Kato *et al.* (US 6,415,200) and Petsche *et al.* do not make up for the aforementioned deficiencies with respect to Hays *et al.* and the subject independent claims. Accordingly, this rejection should be withdrawn.

IV. Rejection of Claim 48 Under 35 U.S.C. §103(a)

Claim 48 stands rejected under 35 U.S.C. §103(a) as being obvious over Hays *et al.* (US 6,260,004), Grimm *et al.* (US 6,369,472), Kato *et al.* (US 6,415,200) and further in view of Gotou, et al. (US 4,933,834). This rejection should be withdrawn for at least the following reason. Claim 48 depends from independent claim 41 and Grimm *et al.* (US 6,369,472), Kato *et al.* (US 6,415,200) and Gotou *et al.* fail to cure the deficiencies with respect to Hays *et al.* and independent claim 41. Accordingly, withdrawal of this rejection is requested.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [ALBRP112USA].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicant's undersigned representative at the telephone number below.

Respectfully submitted,

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